

# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

MARCH 13, 2003

TM GRAIN TRANSPORT COST INDICATORS	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Oo</u> Gulf	cean PNW
Indicator Value* for 03/13	119	103	105	130	132
Compared to Last Week	<b></b>	•	<b></b>	<b></b>	•

\*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

**Cross-Border Trucking.** In November 2002, President Bush signed regulations that would allow Mexican trucks access to highways throughout the United States and U.S. truckers to operate in Mexico beyond the traditional 20-mile commercial zone near the border. When the Secretary of Transportation determines that all safety concerns have been satisfied, President Bush is expected to lift the ban on cross-border trucking. A rush of grain truck traffic from the United States to interior Mexican destinations is not expected to occur immediately after the border opening partly because of the poor quality of Mexican roads and highways, which could take its toll on U.S. trucks. U.S. and Mexican grain truckers may also want to build up more cross-border business relationships before large volumes of trucking operations commence.

Map of Texas Showing Region Concerned About U.S.-Mexico Border

Source: University of Texas

Onee segment of the industry that is concerned about a possible impact resulting from opening the U.S.-Mexico border to truck traffic is the south Texas small grain elevators and grain truckers (see figure). Mexico is the biggest export market for Texas grain sorghum (or milo). Mexico currently imports about 1 million tons per year (2000 figures) to supply the Mexican poultry and cattle industries. Presently, south Texas grain sorghum is trucked to elevator

facilities along the border where it is eventually transferred to Mexican trucks. Ninety percent of south Texas grain sorghum is destined for Mexico.

There are two views developing as to how and to what extent south Texas grain elevator operators, including lower Rio Grande Valley grain elevators and grain truckers, will be affected by the border opening to truck traffic. Some Lower Rio Grande elevator operators and grain sorghum industry officials are concerned that trucks could start hauling grain and sorghum directly from farms to Mexican buyers, bypassing elevators. The result would be a loss of revenue that elevators usually generate by handling and storing grain.

Other lower Rio Grande Valley grain elevator operators do not foresee much impact on operations and truck service mainly because of U.S. truck weight restrictions and expensive fees charged truckers to cross bridges into Mexico. Such requirements, in addition to the fact that Mexican truckers can haul almost twice as much as the federally regulated 50,000-pound payload of U.S. trucks, may preclude U.S. trucks from trying to compete with Mexican trucks south of the border. Very little grain is trucked north from Mexico due in part to severe drought conditions affecting Mexican crops in recent years. *John.batson@usda.gov www.ams.usda.gov/tmd/mta/mta\_special\_reports.htm* 

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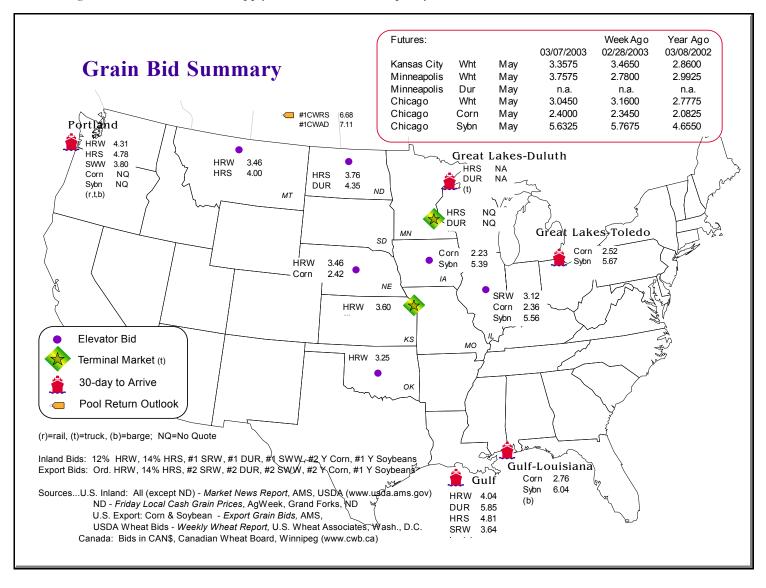
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)					
Commodity	OriginDestination	This week	<u>Last week</u>		
Corn	IL Gulf	-0.40	-0.38		
Corn	NE Gulf	-0.34	-0.31		
Soybean	IA Gulf	-0.65	-0.65		
HRW	KS Gulf	-0.44	-0.24		
HRS	ND Portland	-1.02	-1.05		

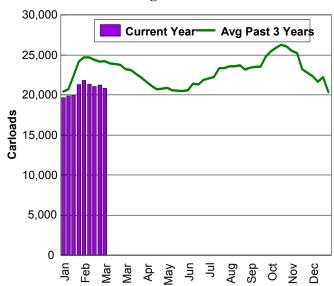
The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



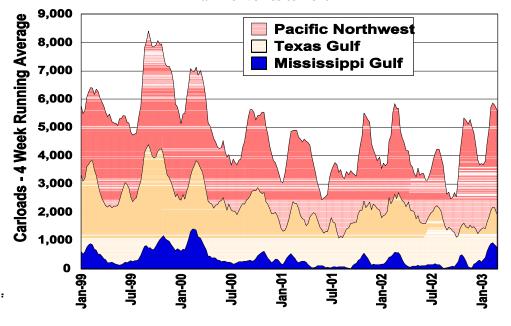
### **RAIL TRANSPORTATION**

Rail Deliveries to Port (Carloads)						
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	
Week Ending:						
02/19/03	827	1,444	3,392	866	6,529	
02/26/03	467	849	4,021	393	5,730	
YTD 2003	6,426	10,206	29,678	6,272	52,582	
YTD 2002	4,196	17,310	22,084	7,466	51,056	
% YTD 2002	153%	59%	134%	84%	103%	
Total 2002	11,112	83,799	111,719	21,551	228,181	
Total 2001	10,022	81,804	111,376	26,604	229,806	
Source: Transport	ation & Marke	ting/AM	S/USDA; (*)	Incomplete Da	ta	

### **Grain Car Loadings for Class I Railroads**



### **Rail Deliveries to Port**



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	East			West		IIC Total	Canada	
	<b>CSXT</b>	NS	BNSF	KCS	UP	U.S. Total	CN	CP
03/01/03	2,881	2,410	7,839	402	5,887	19,419	3,458	3,252
This Week Last Year	2,783	3,333	8,124	581	6,406	21,227	3,643	3,800
2003 YTD	26,491	28,814	71,006	3,584	59,790	189,685	29,310	29,265
2002 YTD	28,029	28,398	76,676	6,391	60,864	200,358	36,152	33,925
% of Last Year	95%	101%	93%	56%	98%	95%	81%	86%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

U.S. Rail Covered Hopper Cars Online Index\*

 Feb-03
 97.0
 100.4
 94.1
 86.4
 92.9
 95.0

Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction					
Delivery for:	Apr-03	May-03	Jun-03		
COT/N. Grain	no bid	no bid	no bid		
COT/S. Grain	no bid	no bid	no bid		
GCAS/Region 1	no bid	no bid	no bid		
GCAS/Region 2	no bid	no bid	no bid		
Source: Transportation & Marketing/AMS/USDA.					

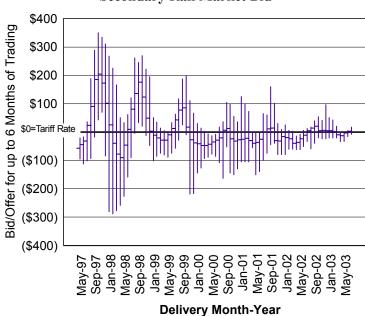
Source: Transportation & Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System

Secondary Rail Car Market
Average Premium/Discount to Tariff, \$/Car - Last
Week

week				
		Delivery	Period	
	Mar-03	Apr-03	May-03	
BNSF-GF	\$(13)	\$(16)	\$(26)	
UP-Pool	\$(2)	\$(24)	\$(24)	

### **Secondary Rail Market Bid**



# **Tariff Rail Rates for Unit Train Shipments**

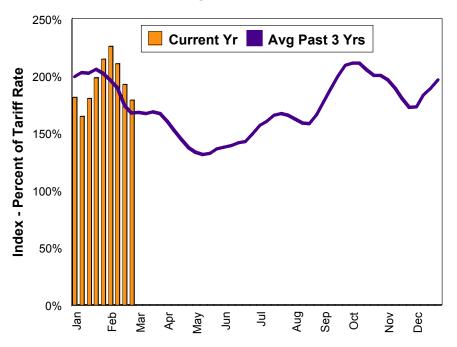
March 200	3						
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
03/03/03	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
03/03/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
03/03/03	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
03/03/03	43586	Wheat	Kansas City, MO	Portland, OR	\$4,420	\$48.72	\$1.33
03/03/03	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
03/03/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
03/03/03	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
03/03/03	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
03/03/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
03/03/03	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

### **BARGE TRANSPORTATION**

### Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate									
	3/5/03 2/26/03 April '03 June '03								
Twin Cities	nq	nq	202	190					
Mid-Mississippi	nq	nq	173	165					
Illinois River	182	169	164	153					
St. Louis	141	133	132	130					
Lower Ohio	128	120	130	132					
Cairo-Memphis	109	109	112	159					
Source: Transportatio	n & Marketing	/AMS/USD	A						

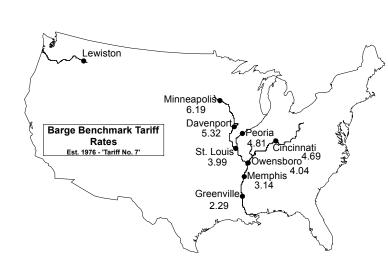
## BARGE FUTURES MARKET

Southbound Barge Freight Nominal/Cash Basis Values

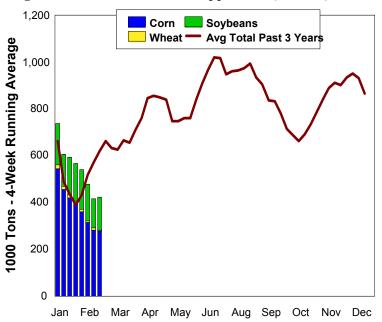
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

		Contract	Ra	te
Week ended	River/Region	Period	Futures	Cash
3/11/03	St. Louis	Apr	n/a	150
		Jun	n/a	148
		Aug	n/a	165
		Oct	n/a	200
		Nov	n/a	170
	Illinois River	Apr	n/a	180
		Jun	n/a	160
		Aug	n/a	173
		Oct	n/a	223
		Nov	n/a	183

Source: St. Louis Merchants Exchange



### Barge Movements on the Mississippi River (Lock 27)



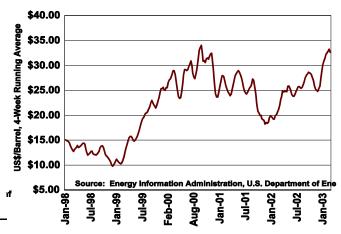
	<u>Corn</u>	<b>Wht</b>	<b>Sybn</b>	<u>Total</u>
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	333	2	77	420
Granite City, IL (L27)	363	15	87	474
Illinois River (L8)	354	2	86	442
Ohio River (L52)	52	5	35	110
Arkansas River (L1)	0	20	11	31
2003 YTD	3,765	323	2,152	6,500
2002 YTD	5,034	318	2,087	7,854
% of 2002 YTD	75%	102%	103%	83%
Total 2001	31,878	2,679	10,616	47,091

### TRUCK TRANSPORTATION

# 

The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

### Weekly Brent Crude Price, Friday Close



Crude Oil Prices (03/4/03) US\$ per Barrel	This Week	<u>Last Week</u>	
Light Sweet Crude (NYMEX)	34.83	34.28	<b></b>
Brent Crude	33.79	34.05	<b>\</b>

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Source: www.eia.doe.gov; \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

# **GRAIN EXPORTS**

		Wheat						Soybean	Total
	HRW	SRW	HRS	SWW	DUR	All			
02/27/2003	1,462	455	1,196	525	166	3,284	5,703	4,098	13,085
This Week Year Ago	1,283	661	826	448	173	3,390	7,285	4,108	14,783
Cumulative Exports-Cr	op Year								
02/03 YTD	5,486	2,261	4,915	2,693	558	15,912	19,904	20,625	56,441
01/02 YTD	6,416	4,159	4,179	2,477	961	18,192	2,170	17,713	38,075
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185

Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)

Crop Year: Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31

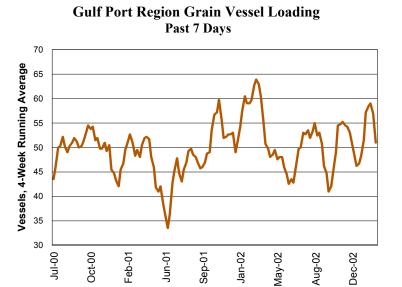
Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)												
	Pac	ific Reg	<u>ion</u>	Mississippi Gulf		Texas Gulf		Port Region Total		<u>ıl</u>		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
03/06/03	173	59	281	84	368	382	80	0	0	513	834	80
2003 YTD	1,368	1,036	1,424	987	5,285	6,992	820	8	11	3,828	13,265	839
2002 YTD	1,815	1,069	888	1,224	6,721	6,289	1,130	14	192	3,772	14,235	1,337
% of 2002 YTD	75%	97%	160%	81%	79%	111%	73%	57%	6%	101%	93%	63%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906
Source: Federal Grain Inspection Service YTD-Year-to-Date												

### **U.S. Grain Inspected for Export**

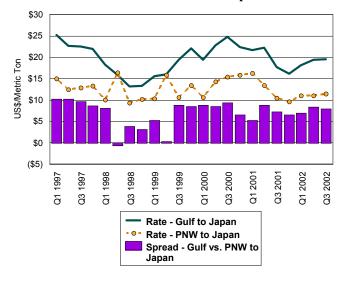


Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary								
02/13/2003 Vancouver	Wheat	<u>Durum</u>	Barley 17					
Prince Rupert	54							
Prairie Direct	2		2					
Thunder Bay								
St. Lawrence	2,723	1,495	203					
2001/02 YTD	7,275	1,766	534					
2002/03 YTD	2,779	1,495	222					
% of Last Year	262%	118%	241%					
Source: Canadian Grains Commission, Crop Year 8/1-7/31								

Port Region Ocean Grain Vessels									
		Gulf		Pacific Northwest	Vancouver B.C.				
		Loaded	Due Next	ţ					
	In Port	7-Days	10-Days	In Port	In Port				
02/27/03	33	45	59	9	1				
03/06/03	47	48	48	8	3				
2002									
Range	(1555)	(3366)	(4482)	(315)	(012)				
2002 Avg	35	51	65	8	5				
Source: Trans	sportation a	& Marketir	ng /AMS/ I	USDA	_				



### **Grain Vessel Rates to Japan**



Quarterly Ocean Freight Rates Average Rates & Percentage Changes, U.S. Dollars/Metric Ton									
		2001 4 <sup>rd</sup> Qtr	% Change	2002 4 <sup>rd</sup> Qtr		% Chang			
Gulf to				Pacific NW to					
Japan :	\$24.75	\$16.25	52%	Japan \$15.39	9 \$9.64	60%			
Mexico	\$7.50	-	-						
N. Europe	\$18.07	\$11.73	54%	Argentina/Brazil t	to				
N. Africa	\$18.33	\$16.98	8%	Med. Sea \$22.00	) -	-			
Med. Sea		\$10.58	-	N. Europe \$22.63	3 \$15.72	44%			
<u> </u>									

Ocean Freight Rates for Selected Shipments - week ending 3/1/03									
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)				
U.S. Gulf	Angola	Corn	Mar. 5/20	12,720	\$117.28*				
U.S. Gulf	Tanzania	Corn	Spot	28,160	\$110.60*				
U.S. Gulf	Kenya	Wheat	Mar. 10/20	44,500	\$73.50*				
U.S. Gulf	Ghana	Wheat	Spot	10,260	\$38.00				
U.S. Gulf	Ethiopia	Wheat	Mar. 5/15	55,200	\$67.25*				
Houston	Ethiopia	Wheat	Mar. 5/15	53,200	\$67.25*				

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

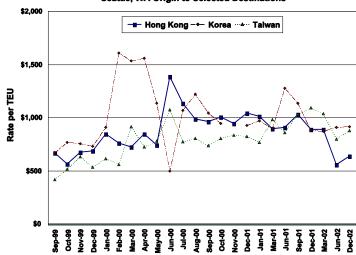
### CONTAINER

### **Container Ocean Freight Rates**

Average Rate per TEU, Weighed by Shipping Line Market Share Source: Transportation & Marketing/AMS/USDA, Quarterly Updates

# Sattle, WA Origin to Tokyo, Japan \$1,500 \$1,000

### Container Rates - Feed Grain Seattle, WA Origin to Selected Destinations



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.